



STIC Search Report **EIC 3700**

STIC Database Tracking Number: 157155

TO: Andres Kashnikow
Location: RND 8A29
Art Unit: 3700
Tuesday, June 21, 2005

Case Serial Number: 09/619391

From: John Sims
Location: EIC 3700
RND 8B31
Phone: 571 272-3507

john.sims@uspto.gov

Search Notes

LITIGATION SEARCH US 5245736:

NO LITIGATION FOUND.

Access DB# 157155

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: KASHNIKOW, ANDY Examiner #: 60484 Date: 6/21/05
Art Unit: 3700 Phone Number: 2-4361 Serial Number: 091619,391
Mail Box and Bldg/Room Location: RND - BA 29 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

LIT. SEARCH - U.S. PATENT
No. 5,245,736

BEST AVAILABLE COPY

STAFF USE ONLY

Searcher: John Sims
Searcher Phone #: 23507
Searcher Location: RND 8B35
Date Searcher Picked Up: _____
Date Completed: 06/21/05
Searcher Prep & Review Time: 10
Clerical Prep Time: _____
Online Time: 10

Type of Search

NA Sequence (#) _____
AA Sequence (#) _____
Structure (#) _____
Bibliographic _____
Litigation _____
Fulltext _____
Patent Family _____
Other _____

Vendors and cost where applicable

STN _____
Dialog _____
Questel/Orbit ☒
Dr.Link _____
Lexis/Nexis ☒
Sequence Systems _____
WWW/Internet _____
Other (specify) _____

1 of 1 DOCUMENT

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

5245736

[Link to Claims Section](#)

September 21, 1993

Vacuum process apparatus

REISSUE: Reissue Application filed Jul. 19, 2000 (O.G. Jul. 31,, (O.G. July 31, 2001)

APPL-NO: 888111 (07)

FILED-DATE: May 26, 1992

GRANTED-DATE: September 21, 1993

ENGLISH-ABST:

The invention proceeds from a vacuum process apparatus for an article which is processed or treated, resp. at two stations, whereby each station has a charging and/or removing opening for the article. A transporting device is supported for rotation and includes a supporting portion which is successively moved onto the openings of the stations. The process plant is designed in such a manner that the surface normals determined by the surfaces of the openings and the space axis defined by the axis of rotation of the transport device do not run parallel and rather enclose together an angle of 90[deg] or 45[deg]. By such an arrangement it is possible to design extremely compact vacuum vapor deposition apparatuses having a plurality of individual stations, whereby additionally short transporting distances are obtainable and the volumes to be conditioned can be minimized.

AKashnikow

?us5245736/pn

** SS 8: Results 1

Search statement 9

?prt full nonstop legalall

1/1 PLUSPAT - (C) QUESTEL-ORBIT- image

CPIM (C) Questel-Orbit

PN - US5245736 A 19930921 [US5245736]

TI - (A) VACUUM PROCESS APPARATUS

PA - (A) BALZERS HOCHVAKUUM (LI)

PA0 - Balzers Aktiengesellschaft, Liechtenstein [LI]

IN - (A) SCHERTLER ROMAN (AT)

AP - US88811192 19920526 [1992US-0888111]

PR - DE4117969 19910531 [1991DE-4117969]

IC - (A) B23B-015/00 B25B-011/00

EC - C23C-014/50

- C23C-014/56F

- H01L-021/677B

PCL - ORIGINAL (O) : 029033000P; CROSS-REFERENCE (X) : 029559000 029563000
269021000

DT - Corresponding document

CT - US3915117; US4652135; EP0136562; EP0161927; EP0389820; JP0130144;
SU0973293

STG - (A) United States patent

AB - The invention proceeds from a vacuum process apparatus for an article which is processed or treated, resp. at two stations, whereby each station has a charging and/or removing opening for the article. A transporting device is supported for rotation and includes a supporting portion which is successively moved onto the openings of the stations. The process plant is designed in such a manner that the surface normals determined by the surfaces of the openings and the space axis defined by the axis of rotation of the transport device do not run parallel and rather enclose together an angle of 90 DEG or 45 DEG . By such an arrangement it is possible to design extremely compact vacuum vapor deposition apparatuses having a plurality of individual stations, whereby additionally short transporting distances are obtainable and the volumes to be conditioned can be minimized.

1/1 LGST - (C) EPO

PN - US5245736 A 19930921 [US5245736]

AP - US88811192 19920526 [1992US-0888111]

ACT - 19920806 US/AS02-A

ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: BALZERS AKTIENGESELLSCHAFT , LIECHTENSTEIN; EFFECTIVE DATE:
19920716

- 19920806 US/AS02-A

ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: SCHERTLER, ROMAN; EFFECTIVE DATE: 19920716

- 19951212 US/RF-A

REISSUE APPLICATION FILED

EFFECTIVE DATE: 19950919

- 20010731 US/RF-A

REISSUE APPLICATION FILED

EFFECTIVE DATE: 20000719

UP - 2003-22

AKashnikow

1/1 CRXX - (C) CLAIMS/RRX

PN - 5,245,736 A 19930921 [US5245736]

PA - Balzers AG LI

ACT - 19950919 REISSUE REQUESTED

ISSUE DATE OF O.G.: 19951212

REISSUE REQUEST NUMBER: 08/530778

EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3206

Reissue Patent Number:

- 20000719 REISSUE REQUESTED

ISSUE DATE OF O.G.: 20010731

REISSUE REQUEST NUMBER: 09/619391

EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3726

Reissue Patent Number:

AKashnikow

?fam us5245736/pn

1 Patent Groups
** SS 9: Results 8

Search statement 10

?famliste nonstop

1/8 PLUSPAT - (C) QUESTEL-ORBIT
PN - AT162854 T 19980215 [ATE162854]
STG - (T) EP Patent valid in AT
OTI - (T) VAKJUMBEHANDLUNGSANLAGE
PA - (T) BALZERS HOCHVAKUUM (LI)
IN - (T) SCHERTLER ROMAN (AT)
IC - (T) C23C-014/34 C23C-014/50 C23C-014/56 H01L-021/00
AP - AT92108771T 19920525 [1992AT-0108771]
PR - DE4117969 19910531 [1991DE-4117969]

2/8 PLUSPAT - (C) QUESTEL-ORBIT
PN - DE4117969 A1 19921203 [DE4117969]
STG - (A1) Doc. Laid open (First publication)
OTI - (A1) VAKJUMBEHANDLUNGSANLAGE
PA - (A1) BALZERS HOCHVAKUUM (LI)
IN - (A1) SCHERTLER ROMAN (AT)
IC - (A1) B01J-003/04 B65G-049/07
PN2 - DE4117969 C2 20001109 [DE4117969]
STG2- (C2) Patent Specification (Second publication)
OTI2- (C2) Vakuumkammer
PA2 - (C2) BALZERS AG LIECHTENSTEIN (LI)
IN2 - (C2) SCHERTLER ROMAN (AT)
IC2 - (C2) B01J-003/04 B65G-049/07
AP - DE4117969 19910531 [1991DE-4117969]
PR - DE4117969 19910531 [1991DE-4117969]
EC - C23C-014/50
- C23C-014/56F
- H01L-021/677B
DT - Corresponding document

3/8 PLUSPAT - (C) QUESTEL-ORBIT
PN - DE59209160 D1 19980305 [DE59209160]
STG - (D1) Granted EP number in bulletin
OTI - (D1) Vakuumbehandlungsanlage
PA - (D1) BALZERS HOCHVAKUUM (LI)
IN - (D1) SCHERTLER ROMAN (AT)
IC - (D1) C23C-014/34 C23C-014/50 C23C-014/56 H01L-021/00
AP - DE59209160 19920525 [1992DE-5009160]
PR - DE4117969 19910531 [1991DE-4117969]
- DE59209160 19920525 [1992DE-5009160]

4/8 PLUSPAT - (C) QUESTEL-ORBIT- image
CPIM
PN - EP0518109 A1 19921216 [EP-518109]
STG - (A1) Public. Of applic. With search report
TI - (A1) Apparatus for vacuum treatment.
OTI - (A1) Vakuumbehandlungsanlage.
- (A1) Systeme de traitement sous vide.
PA - (A1) BALZERS HOCHVAKUUM (LI)

AKashnikow

IN - (A1) SCHERTLER ROMAN (AT)
IC - (A1) C23C-014/34 C23C-014/50 C23C-014/56 H01L-021/00
PN2 - EP0518109 B1 19980128 [EP-518109]
STG2- (B1) Patent
TI2 - (B1) Apparatus for vacuum treatment
OTI2- (B1) Vakuumbehandlungsanlage
- (B1) Systeme de traitement sous vide
PA2 - (B1) BALZERS HOCHVAKUUM (LI)
IN2 - (B1) SCHERTLER ROMAN (AT)
IC2 - (B1) C23C-014/34 C23C-014/50 C23C-014/56 H01L-021/00
LA - GERMAN (GER)
AP - EP92108771 19920525 [1992EP-0108771]
PR - DE4117969 19910531 [1991DE-4117969]
EC - C23C-014/50
- C23C-014/56F
- H01L-021/677B
DS - AT CH DE FR GB LI NL
DT - Basic

5/8 PLUSPAT - (C) QUESTEL-ORBIT
PN - JP5184903 A 19930727 [JP05184903]
STG - (A) Doc. Laid open to publ. Inspec.
TI - VACUUM PROCESS APPARATUS AND DEVICE FOR HOLDING DISK-SHAPED ARTICLE TO
BE PROCESSED HAVING CENTRAL HOLE DURING VACUUM PROCESS
PA - (A) BALZERS HOCHVAKUUM
PA0 - (A) BALZERS AG
IN - (A) ROMAN SHIYATORAA
IN0 - (A) SCHERTLER ROMAN
IC - (A) B01J-003/00 B01J-003/02 C23C-016/44 G11B-007/26 G11B-011/10
PN2 - JP7063612 B 19950712 [JP95063612]
STG2- (B) Publd. Examined patent applic.
PN3 - JP2030845 C 19960319 [JP2030845]
STG3- (C) Granted patent from 1000001 onwards
IC3 - (C) B01J-003/00 B01J-003/02
AP - JP14035792 19920601 [1992JP-0140357]
PR - DE4117969 19910531 [1991DE-4117969]

6/8 PLUSPAT - (C) QUESTEL-ORBIT
PN - KR247597 B1 20000315 [KR-247597]
STG - (B1) Examined pat. App. (2nd pub.) B5
TI - (B1) VACUUM TREATMENT APPARATUS
PA - (B1) BALZERS HOCHVAKUUM (LI)
IN - (B1) SCHERTLER ROMAN (AT)
IC - (B1) B01J-003/04
AP - KR9209321 19920529 [1992KR-0009321]
PR - DE4117969 19910531 [1991DE-4117969]
UP - 2000-39

7/8 PLUSPAT - (C) QUESTEL-ORBIT
PN - KR247599 B1 20000315 [KR-247599]
STG - (B1) Examined pat. App. (2nd pub.) B5
TI - (B1) APPARATUS FOR VACUUM TREATMENT
PA - (B1) BALZERS HOCHVAKUUM (LI)
IN - (B1) SCHERTLER ROMAN (AT)
IC - (B1) B01J-003/00
AP - KR9720286 19970523 [1997KR-0020286]
PR - DE4117969 19910531 [1991DE-4117969]
- KR9209321 19920529 [1992KR-0009321]
UP - 2000-39

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8/8 PLUSPAT - (C) QUESTEL-ORBIT- image

CPIM (C) Questel-Orbit

PN - US5245736 A 19930921 [US5245736]

STG - (A) United States patent

TI - (A) VACUUM PROCESS APPARATUS

PA - (A) BALZERS HOCHVAKUUM (LI)

PA0 - Balzers Aktiengesellschaft, Liechtenstein [LI]

IN - (A) SCHERTLER ROMAN (AT)

IC - (A) B23B-015/00 B25B-011/00

AP - US88811192 19920526 [1992US-0888111]

PR - DE4117969 19910531 [1991DE-4117969]

EC - C23C-014/50

- C23C-014/56F

- H01L-021/677B

PCL - ORIGINAL (O) : 029033000P; CROSS-REFERENCE (X) : 029559000 029563000
269021000

DT - Corresponding document

1/4 LEGALI - (C) EPO

PN - US5245736 A 19930921 [US5245736]

AP - US88811192 19920526 [1992US-0888111]

ACTE- 19920806 US/AS02-A

ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: BALZERS AKTIENGESELLSCHAFT, LIECHTENSTEIN; EFFECTIVE DATE:
19920716

- 19920806 US/AS02-A

ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: SCHERTLER, ROMAN; EFFECTIVE DATE: 19920716

- 19951212 US/RF-A

REISSUE APPLICATION FILED

EFFECTIVE DATE: 19950919

- 20010731 US/RF-A

REISSUE APPLICATION FILED

EFFECTIVE DATE: 20000719

UP - 2003-22

2/4 LEGALI - (C) EPO

PN - DE59209160 D1 19980305 [DE59209160]

AP - DE59209160 19920525 [1992DE-5009160]

ACTE- 19990304 DE/8364-A [+]

NO OPPOSITION DURING TERM OF OPPOSITION

UP - 2003-22

3/4 LEGALI - (C) EPO

PN - DE4117969 A1 19921203 [DE4117969]

- DE4117969 C2 20001109 [DE4117969]

AP - DE4117969 19910531 [1991DE-4117969]

ACTE- 19921203 DE/OP8-A [+]

REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW

- 20001109 DE/D2-A [+]

GRANT AFTER EXAMINATION

- 20010510 DE/8364-A [+]

NO OPPOSITION DURING TERM OF OPPOSITION

- 20010517 DE/8327-A

CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER

OWNER: UNAXIS BALZERS AG, BALZERS, LI

UP - 2003-22

AKashnikow

4/4 LEGALI - (C) EPO

PN - EP0518109 A1 19921216 [EP-518109]

- EP0518109 B1 19980128 [EP-518109]

AP - EP92108771 19920525 [1992EP-0108771]

ACTE- 19921216 EP/AK-A [+]

DESIGNATED CONTRACTING STATES:

AT CH DE FR GB LI NL

- 19930331 EP/17P-A [+]

REQUEST FOR EXAMINATION FILED

EFFECTIVE DATE: 19930204

- 19941005 EP/17Q-A [+]

FIRST EXAMINATION REPORT

EFFECTIVE DATE: 19940823

- 19980128 EP/AK-A [+]

DESIGNATED CONTRACTING STATES:

AT CH DE FR GB LI NL

- 19980128 EP/REF-A

CORRESPONDS TO:

(AT 162854T 19980215 [ATE162854])

- 19980130 EP/REG-A; CH/EP [+]

CH: ENTRY IN THE NATIONAL PHASE

<CH>

- 19980225 EP/GBT-A [+]

GB: TRANSLATION OF EP PATENT FILED (GB SECTION 77(6)(A)/1977)

EFFECTIVE DATE: 19980129

- 19980305 EP/REF-A

CORRESPONDS TO:

(DE 59209160 19980305 [DE59209160])

- 19980417 EP/ET-A [+]

FR: TRANSLATION FILED

- 19990120 EP/26N-A [+]

NO OPPOSITION FILED

- 20020101 EP/REG-A; GB/IF02 [+]

GB: EUROPEAN PATENT IN FORCE AS OF 2002-01-01

<GB>

UP - 2003-22

No Documents Found!

No documents were found for your search (**5245736** or **5,245,736**). Click the "Edit Search" button below to try again. You may want to try one or more of the following:

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